



# Australian Bureau of Statistics

## CensusAtSchool Australia

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### Resources



### CaSQ 22 - Back to Back Stem and Leaf Plot of Sex vs. Concentration Time

You can download this activity as a rich text file (RTF) using the link at the bottom of the page.

#### How to: Get a Random Sample from CensusAtSchool

Go to the CensusAtSchool [Random Sampler](#) to download a sample.

**Reference year:** *(Select year)* **Sample size:** at least 50 students

**Select questions:** *Sex, Concentration time*

**Location:** *Select location* **Year level:** *(Select a range of year levels)*

*To protect privacy there is a rule built into the sampler that the requested sample size cannot exceed 10% of the respondents for the parameters entered.*

#### Task:

Back to back stem and leaf plots are used when the same data is collected from two different groups that we are interested in comparing.

1. Collect data about the concentration time of 50 students. Find the minimum and maximum values overall and set up the stems in the table below. Use the leaves to record the times for males and females. Data needs to be spread evenly in the leaves.

| Unordered concentration times |  |         |
|-------------------------------|--|---------|
| Males                         |  | Females |
|                               |  |         |

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2. Use the ordered stem and leaf plot below to order the data from above. Remember a stem and leaf plot is not complete until it has a title and a key.

| Ordered concentration times |  |         |
|-----------------------------|--|---------|
| Males                       |  | Females |
|                             |  |         |
|                             |  |         |
|                             |  |         |
|                             |  |         |
|                             |  |         |
|                             |  |         |
|                             |  |         |

3. Use the shape, centre and spread of the stem and leaf plot to compare the distribution of males compared with females. What is similar and what is different?

Download the full activity: [RTF](#)

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